

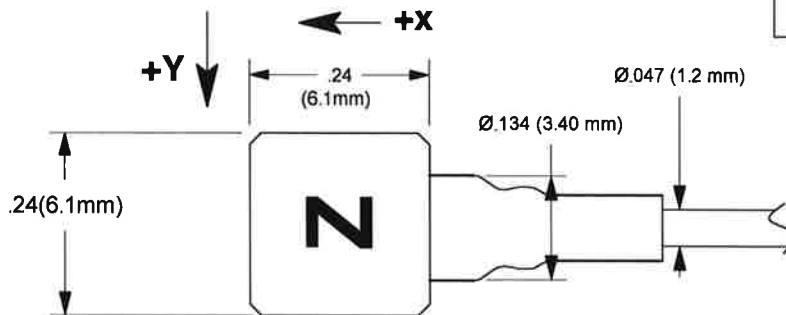
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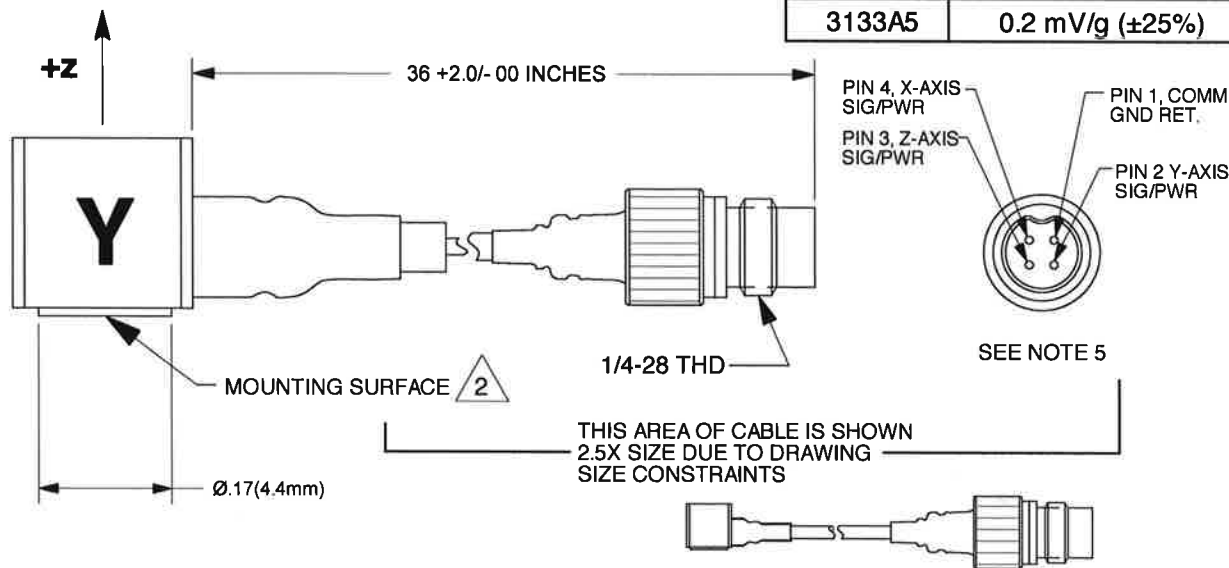
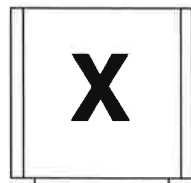
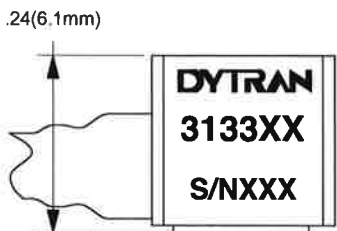
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
G	11379	ADDED 3133A5	LN 09-17-14	EP	RT
H	12409	UPDATED VIEW OF CONNECTOR (KNURLING)	JS 12/15/15	LA	LN
J	12992	3133A5 SENSITIVITY WAS: 0.25 Mv/g (+/-25%)	JS 10/07/16	LA	LN



REMOVAL TOOL MODEL 6741, INCLUDED (ACTUAL SIZE)



VARIATION CHART	
MODEL	SENSITIVITY
3133A1	10 mV/g (±15%)
3133A2	2 mV/g (±25%)
3133A3	5 mV/g (±20%)
3133A4	0.7 mV/g (±25%)
3133A5	0.2 mV/g (±25%)



- UNLESS OTHERWISE INDICATED, ALL DIMENSIONS ARE IN INCHES. mm DIMENSIONS ARE INDICATED BY PARENTHESES.
- MODEL 6298 PETRO MOUNTING WAX IS INCLUDED.
- MATING CABLES ARE MODELS 6824AXX (SANTOPRENE), OR 6811AXX, (TEFLON) 4-PIN CONNECTOR TO 3 BNC's. "XX" IS THE CABLE LENGTH IN FEET. EX. :CABLE MOD. 6811A3 (3 FT. NOM.).
- HOUSING MATERIAL: TITANIUM.
- THE LETTERS "X", "Y", & "Z" INDICATE THE DIRECTION OF ACCELERATION OF EACH AXIS FOR POSITIVE GOING OUTPUT VOLTAGE (AS THE MARKED SURFACE ACCELERATES TOWARD THE VIEWER.) SEE DIRECTIONAL ARROWS ON FACE OF DRAWING.
- FOR BEST FREQUENCY RESPONSE, PREPARE FLAT MOUNTING SURFACE OF AT LEAST .20 DIAMETER, FLAT TO .0001 TIR. APPLY ONE DROP OF CYANOACRYLATE ADHESIVE TO MOUNT THE ACCELEROMETER.
- WEIGHT, LESS CABLE: 0.8 GRAMS.

# MASTER

## ONLY IF IN RED

CHATSWORTH, CA.

SCALE 4X	DESIGN N.C.	DATE 11-10-08		
DRAWN N.C.	DATE 11-10-08	PART NO.	SEE CHART	
CHECKED D.V.	DATE 05-18-09	MAT'L		REV J
APPROVED ANS	DATE 05-26-09	NEXT ASSEMBLY	USED ON	3133A1, A2, A3, A4, A5
TITLE <b>OUTLINE/INSTALLATION DRAWING, MODEL SERIES 3133A TRIAXIAL ACCELEROMETERS</b>			DWG NO. <b>127-3133A</b>	
			SHEET 1 OF 1	

Model Number	<b>PERFORMANCE SPECIFICATION</b>			DOC NO	
				<b>PS3133A4</b>	
<b>3133A4</b>	<b>Accelerometer, Triaxial, IEPE</b>			REV J, ECN 12956, 09/14/16	



- ULTRA MINIATURE SIZE
- IDEAL LOW FREQUENCY RESPONSE

	ENGLISH		SI	
Weight	oz	0.03	grams	0.8
Size	Width	inch	mm	6.1
	Height	inch	mm	6.1
Mounting		Adhesive		Adhesive
Integral Cable	Length	ft	mm	914
	Type			TFE
Connector	Type			4-pin
	Housing			Titanium
Sensing Element	Isolation			Case Ground
	Material			Quartz
	Mode			Shear

**PHYSICAL**

Weight	oz	0.03	grams	0.8
Size	Width	inch	mm	6.1
	Height	inch	mm	6.1
Mounting		Adhesive		Adhesive
Integral Cable	Length	ft	mm	914
	Type			TFE
Connector	Type			4-pin
	Housing			Titanium
Sensing Element	Isolation			Case Ground
	Material			Quartz
	Mode			Shear

**PERFORMANCE**

Sensitivity [1], [2], ± 25%	mV/g	0.7	mV/m/s <sup>2</sup>	0.07
Acceleration Range	Gpeak	5000	m/s <sup>2</sup> peak	49050
Frequency Range, ±5%	Hz	0.7 to 6000	Hz	0.7 to 6000
Frequency Range, ±10%	Hz	0.7 to 10000	Hz	0.7 to 10000
Linearity [4]	% F.S.	± 1	% F.S.	± 1
Resonance Frequency	kHz	>35	kHz	>35
Transverse Sensitivity	%	6	%	6
Bias Voltage	VDC	+7 to +9	VDC	+7 to +9
Output Impedance	Ω	100	Ω	100
Noise floor	Grms	0.15	m/s <sup>2</sup> rms	1.47
Discharge Time Constant	seconds	0.5 to 2.5	seconds	0.5 to 2.5
Spectral Noise	1Hz	μGrms/sqr(Hz)	μm/s <sup>2</sup> rms/sqr(Hz)	39240
	10Hz	μGrms/sqr(Hz)	μm/s <sup>2</sup> rms/sqr(Hz)	19620
	100Hz	μGrms/sqr(Hz)	μm/s <sup>2</sup> rms/sqr(Hz)	4905
	1000Hz	μGrms/sqr(Hz)	μm/s <sup>2</sup> rms/sqr(Hz)	1962
	10000Hz	μGrms/sqr(Hz)	μm/s <sup>2</sup> rms/sqr(Hz)	883

**ENVIRONMENTAL**

Shock	Gpeak	7000	m/s <sup>2</sup>	68670
Vibration	Gpeak	6000	m/s <sup>2</sup>	58860
Operating Temperature	°F	-67 to +320	°C	-55 to +160
Seal		Epoxy		Epoxy
Magnetic Sensitivity at 100 Gauss	g/Gauss	0.00004	m/s <sup>2</sup> /Gauss	0.00039
	Base Strain Sensitivity	g/με	m/s <sup>2</sup> /με	1.47

**POWER**

Compliance Voltage	VDC	+18 to +30	VDC	+18 to +30
Current Range	mA	2 to 20	mA	2 to 20

**This family also includes:**

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC
3133A1	10	500	0.02	-67 to 320	1.0 to 1.5
3133A2	2	2500	0.15	-67 to 320	0.3 to 2.5
3133A3	5	1000	0.06	-67 to 320	1.0 to 1.5
3133A5	0.2	20000	0.35	-67 to 320	0.5 to 4.0

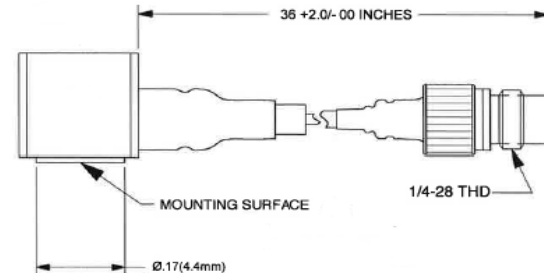
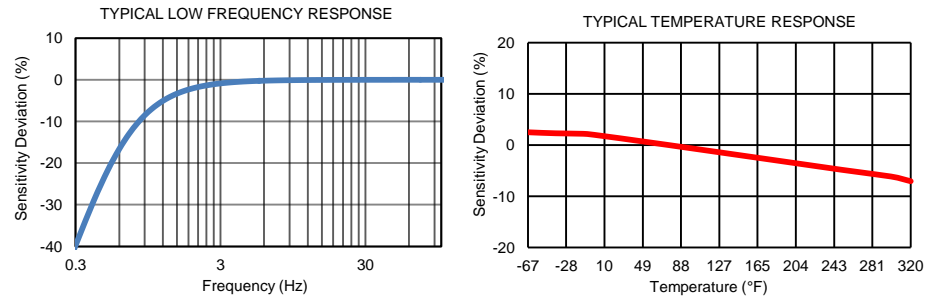
Please, refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Model 6298 small petro wax
- 2) Model 6741 removal tool
- 3) Accredited calibration certificate (ISO 17025)

**Notes:**

- [1] Measured at 100 Hz, 10 Grms
- [2] Actual sensitivity is given on a calibration certificate
- [3] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier
- [4] Measured using zero-based straight line method, % of F.S. or any lesser range.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3133A for more information.



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